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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/769,914	02/03/2004	Yoshihiro Kumagai	248380US3	9774

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EXAMINER	
SEVER, ANDREW T	
ART UNIT	**PAPER NUMBER**
2851	

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/769,914	KUMAGAI ET AL.	
	Examiner	Art Unit	
	Andrew T. Sever	2851	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 February 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *5/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Figures 4-7 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe et al. (US 5,513,036.)

Watanabe teaches in figure 2 a rear projection screen for use in a rear projection display apparatus, comprising at least three lens sheets including:

A Fresnel lens sheet (7),

A horizontal lenticular lens sheet capable of horizontally refracting the incident light (6 is a horizontal linear Fresnel lens sheet which can be considered to be a horizontal lenticular lens sheet), and

A vertical lenticular lens sheet (2 the lenticules are specified to be arrayed in the vertical direction) capable of vertically refracting the incident light, in this order from the incident side of the incident light (from point A),

(It should be noted that the terms horizontal and vertical are relative terms and accordingly the order of a horizontal and then vertical lens sheet can be reversed since the horizontal sheet becomes the vertical relative to a 90-degree rotation. Applicant claims no preferred direction.)

The vertical lenticular lens sheet having a lenticular lens on its incident surface and black stripes in the vicinity of the focus of the lenticular lens in portions where the incident light does not pass through (See figure 3, parts 5a are the lens part 5c is the black stripes (see column 4 lines 20-23.)

Wherein the lens center of the Fresnel lens sheet is arranged upward with respect to the mechanical center of the screen, and in relation to this arrangement, the black stripes of the vertical lenticular lens sheet are shifted with respect to the vertical lenticular lens (Watanabe teaches in column 5 lines 8-30 that the Fresnel lens sheet is offset and the lenticular lens sheets are appropriately offset. In column 8 lines 10-14 it taught that the light absorbing layer (black stripes) are positioned (shifted) in such a way as to improve

contrast and block non-converging portions of the incident light, since offsetting the Fresnel lens changes where the non-converging portion are located, inherently the stripes are appropriately shifted.)

With regards to applicant's claim 2:

See column 8 lines 16-21 which teaches that at least the vertical lenticular sheet contains particles for light diffusion.

With regards to applicant's claim 4:

See figure 1.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. as applied to claim1, 2, and 4 above, and further in view of Goto et al. (US 2002/0149846.)

As described in more detail above Watanabe teaches a rear projection screen which among other things includes a vertical lenticular lens sheet. Watanabe however does not teach a focal length of the lenticules or the ratio of the width of black stripes to the lenticular lens pitch. Goto provides such teachings for a rear projection screen in paragraph 101 (at least a focal length of .18 mm with the pitch of 0.1 mm is within applicant's claimed range) and in paragraph 82 that the ratio of the blocking portion to the lens pitch is between 40% to 90% which overlaps applicant's claimed range. Goto teaches in paragraphs 79-82 that these particular ranges limit moiré, optical interference, decrease reflectivity with regards to external light, and they increase transmissivity. Accordingly it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Goto's limitations on the performance specs of the vertical lenticular lens sheet in the rear projection screen of Watanabe as they improve the optical performance of the rear projection screen.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-4 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 8, 6, 7, and 9 respectively (all combined with claim 8) of copending Application No. 10/502,642 as provided by applicant's IDS of 10/2004. Although the conflicting claims are not identical, they are not patentably distinct from each other because although applicant in the '642 application claims all the limitations of claims 1-4 of the present application, claims 6, 7, and 9 of the '642 application are not combined with the limitations of claim 8 which corresponds to claim 1 of the present application, however it would have been obvious to one of ordinary skill in the art to do so as the limitations of the '642 claim 8 has advantages over prior art projections screens that do not include the offset (either see applicant's own specification or see the Watanabe et al. reference for explanation of why those limitations are useful).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

JP8-101459-A to Matsushita Electric Industrial Co., which teaches in figure 3 a projection screen like Watanabe's with the opposite orientation of the screens (the horizontal and vertical screens are flipped). See accompanying translation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T. Sever whose telephone number is 571-272-2128. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AS

JUDY NGUYEN
SUPERVISORY PATENT EXAMINER